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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/519,119

12/23/2004

Daniele Fregonese

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EXAMINER

KUMAR, PREETI

ART UNIT

PAPER NUMBER

1751

MAIL DATE

DELIVERY MODE

06/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Office Action Summary</p>	Application No. 10/519,119	Applicant(s) FREGONESE ET AL.	
	Examiner Preeti Kumar	Art Unit 1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/23/04 and 5/27/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Non-Final Rejection

1. Claims 1-27 are pending.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 12/23/04 and 5/27/05 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is indefinite how one can have a composition with at least 70% of the remainder of the composition of an ionic salt and still have 60% water and the other requisite components of the composition. The claimed percentage ratios exceed 100% and accordingly are indefinite. Furthermore, what do Applicants mean by remainder? It is indefinite if Applicants are claiming at least 70% of the composition comprising a water soluble ionic salt?

Several claims recite limitation to 1) an organic water miscible solvent, 2) water-soluble encapsulating agent, and 3) and enzyme stabilizing aid. It is indefinite if and why 3 different phrases are being used to express the same component? Claims 17-21 are indefinite because the claims don't make sense. Specifically claim 17 recites the limitation "wherein the stabilizing aid is a water miscible organic solvent" Then claim 18 recites the water miscible organic solvent is propylene glycol. Then by some logic unenounced to anyone of ordinary skill, claims 19-21 attempt to state that the same stabilizing aid that was the propylene glycol solvent is now calcium salt, sugar and/or starch? Review of what concept is being sought after for patent protection is necessary.

Regarding claim 14's limitation to ratio of gel enzyme to particle enzyme, the term "gel enzyme" is a relative term which renders the claim indefinite. The term "gel enzyme" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Examiner does not find any guidance in applicants specification regarding what is encompassed by gel enzyme.

The instant claims are replete with lack of antecedent basis problems. Specifically, claim 3 recites the limitation "wherein the migration speed of the particles..." in claim 1.

Claim 6 recites the limitation "wherein the gel..." in claim 1.

Claim 9 recites the limitation "wherein the nonaqueous portion..." in claim 1.

Claim 11 recites the limitation "citrate salt" in claim 10.

Claim 16 recites the limitation "wherein the enzyme stabilizing aid..." in claim 1.

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Claim 20 recites the limitation "wherein the particles..." in claim 1. Furthermore it is unclear how claim 20 can recite a percentage of 40-70% while claim 16 recites the stabilizing aid to have 0.05-20%. Also it is unclear how there can be at least 70% ionic salt in claim 1 and then 40% of the particles?

There is insufficient antecedent basis for these limitations in these claims.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olsen et al. (US 5,122,159).

Olsen et al. teach a boron free, aqueous detergent composition comprising surfactant, cellulase enzyme, water soluble solvent, and water soluble alkali metal salt. See col.12, tables 5-7.

Regarding the water soluble solvent, Olsen et al. teach propylene glycol. See col9,ln.5-10.

Olsen et al. teach 0-50% of one or more builder components selected from alkali metal salts and high molecular electrolytes such as polyacrylic acid, starch, sugars and hydratable alkali metal or alkaline earth metal inorganic salts that can solidify through hydration. Such compositions include sodium, potassium or calcium, carbonate, bicarbonate, tripolyphosphate silicate, and other hydratable salts.. See col.9,ln.15-35, 60-65 and co.10,ln.15-20.

Regarding the thickener, Olsen et al. provide motivation to manufacture in the cellulase treatment composition in the form of a thickened liquid or a gel since the thickened or gelled compositions tend to maintain the uniformity of the enzyme containing compositions and can ensure that the enzyme treatments are uniform. Such thickeners include organic and naturally occurring polymers such as ethylene vinyl acetate copolymers, polyethylene waxes, acrylic polymers, cellulosic polymers including carboxymethyl cellulose, carboxyethyl cellulose, cellulose acetates, ethoxylated cellulose, alkanolamides, waxy alcohols, and others; magnesium aluminum silicates, bentonite clays, fumed silica, xanthan guar gum, algin derivatives, polyvinyl pyrrolidone, di and tristearate salts, and other conventional thickeners. See col.10,ln.30-50.

Regarding the water soluble encapsulating agent, Olsen et al. teach palletizing the enzyme using well known pressure pelletizing techniques in which the cellulase enzyme in combination with a binder is compacted under pressure. See col.8,ln.15-20.

Olsen et al. teach an enzyme concentration of at least 1000CMC units of enzyme per liter of solution in the aqueous composition. See col.10,ln.50-55. Olsen et al. teach that the use of cellulase enzyme preparations is known in laundry cleaning or detergent compositions that are designed for soil removal typically contain surfactants (typically anionic), fillers, brighteners, clays, cellulase and other enzymes (typically proteases, lipases or amylases) and other laundry components to provide a full functioning laundry detergent preparation. The cellulase enzymes in combination with the surfactants used in common laundry compositions for cleaning apparently can remove particulate soil and can restore the new appearance of clothing items. See col.3,ln.20-25.

Olsen et al. do not specifically teach a detergent composition comprising the claimed ratio of water soluble ionic salt and the claimed viscosity, migration speed, and density as recited by the instant claims.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made to arrive at a composition comprising the claimed percentage of water soluble ionic salt as recited by the instant claims, because Olsen et al. provide one of ordinary skill the motivation to optimize the ratio of water soluble ionic salt. See col.9. Also, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to arrive at a composition comprising the claimed viscosity, migration speed, and density as recited by the instant claims because Olsen et al. provide one of ordinary skill the motivation to arrive at a composition comprising the same components which would be reasonable expected to have the same properties. See tables 5-7.

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9. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conner et al. (US 6,395,701).

Conner et al. illustrate a liquid laundry detergent composition comprising water, 0-5% PAA thickener, 0-5% protease, cellulase and amylase enzymes, and 0-2% solvent, and 20-30% carbonate salts. See col.98,example II.

Regarding citrate salts, Conner et al. provide motivation to one of ordinary skill to include citric acid and soluble salts thereof as important carboxylate builders in heavy duty liquid detergents, due to availability from renewable resources and biodegradability. See col.63,ln.1-5.

Regarding the ionic salts, Conner et al. teach one of ordinary skill to optimize the amount of phosphates and polyphosphates, especially the sodium salts; carbonates, bicarbonates, sulfates, in an amount of about 5% to about 50%, in liquid detergent compositions. See col.61,ln.55-col.62,ln.40.

Regarding the water miscible solvent, Conner et al. teach water soluble solvents like ethanol, isopropanol, propylene glycol, 1,3-propanediol, propylene carbonate, etc., See col.16,ln.5-10.

In col.81-82, Conner et al. teach thickeners, gelling agents and emulsifiers, dyes and fragrances may be included in the detergent compositions.

Conner et al. do not specifically teach 70% ionic salt as attempted to be recited by the instant claim 1 and do not the claimed viscosity, migration speed, and density as recited by the instant claims.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made to arrive at a composition comprising the claimed percentage of water soluble ionic salt as recited by the instant claims, because Conner et al. provide one of ordinary skill the motivation to optimize the ratio of water soluble ionic salt. See col.61,ln.55-col.62,ln.40. Also, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to arrive at a composition comprising the claimed viscosity, migration speed, and density as recited by the instant claims because Olsen et al. provide one of ordinary skill the motivation to arrive at a composition comprising the same components and would be expected to have the same properties of viscosity, migration speed, and density as recited by the instant claims. See col.98,example II.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Preeti Kumar whose telephone number is 571-272-1320. The examiner can normally be reached on M-F 9:00am - 5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Mc Ginty can be reached on 571-272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Preeti Kumar *PK*
Examiner
Art Unit 1751

PK

GREGORY DELCOTTO
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Gregory Delcotto', written over the printed name and title.